DOT STRATEGIC GOAL: ECONOMIC GROWTH AND TRADE

Advance American's economic growth and competitiveness domestically and internationally through efficient and flexible transportation.

DOT's program activities impact our Nation's competitiveness and prosperity through a number of common interventions and actions: direct operations (such as efficient air traffic control or vessel traffic services), infrastructure investment (funding for the National Highway System), grants for transit improvement, grants for airport improvement, rulemaking (such as allocation of airport slots or the elimination of trade barriers), technology (fostering new materials and technologies to enhance the efficiency and flexibility of transportation operations); and transportation-related education and public awareness. Some of these interventions and actions reside entirely within the Federal Government, although most involve significant partnering with State and local authorities and with the transportation industry. DOT provides national leadership in guiding transportation's contribution to economic growth and trade, integrating the efforts of all partners to advance our common goal – advancing American's economic growth and competitiveness through efficient and flexible transportation.

INFRASTRUCTURE INVESTMENT

FHWA partners with States and other authorities to promote infrastructure development and improvement through direct funding, grants and technical assistance. The DOT Joint Program Office coordinates work on Intelligent Transportation Systems (ITS) and other cross-modal initiatives designed to reduce highway congestion and improve safety.

- ***Intelligent Transportation Systems (ITS) Program*** is designed to research, develop, and operationally test advanced vehicle and highway systems; develop an automated highway system; and promote such technology as a means to increase the efficiency of the Nation's highways.

  The program funds States, local governments, and private entities to develop and test new technologies, processes, procedures, and other activities that have the potential to enhance the efficiency of transportation infrastructure (e.g., increase the capacity of an existing highway by increasing the average speed), or improve operations of the vehicle using the infrastructure. ISTEA and TEA-21 provided about $730 million in contract authority for 1992 through 1998 ($95 million was authorized in 1998 for ITS standards and research, and $101 million for deployment).

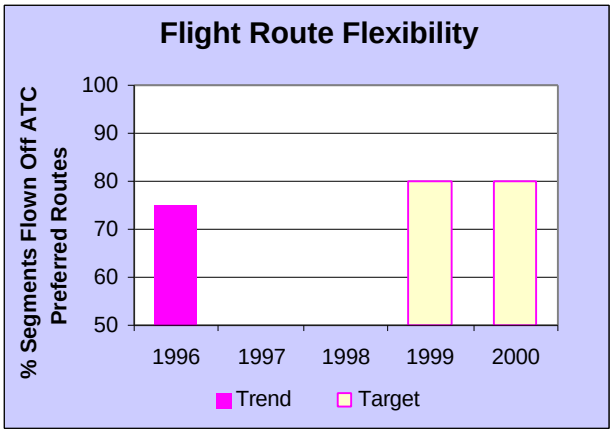
  Over the life of ISTEA and TEA-21 the ITS program has tested and proved the viability of numerous technologies and applications. Over 83 operational tests, 28 of which are completed, are demonstrating the viability of first generation ITS technologies and services. We are now seeing products and services refined by operational test program--such as Boston SmarTraveler's real-time travel information service or Help, Inc.'s Pre-Pass electronic clearance system for trucks--become self sufficient and competitive in the marketplace.

AIR TRAFFIC CONTROL (ATC) SERVICES

With Free Flight Phase I, FAA is aiming to improve the spacing of traffic streams into major airports and maximize the use of available capacity. FAA is also developing improved weather reporting.

Some of FAA's current and ongoing activities include: (1) Bringing on-line and making operational air traffic control (ATC) equipment and aeronautical navigation equipment now being delivered as part of the modernization of the ATC system; (2) Replacing the aging computer equipment at all en route centers with the display system replacement (DSR), and in terminal facilities with the standard terminal automation replacement system (STARS). This new equipment will further reduce the number of outages, reduce delays, and allow optimum use of capacity to accommodate growth in operations; (3) Developing and exploiting Global Positioning System (GPS) satellite navigation; (4) Implementing, at various locations, new procedures that take advantage of additional runway and airport capacity increases; (5) Deploying prototype automation tools, such as the passive final approach spacing tool (pFAST), to aid in evaluating the final approach environment, provide sequencing of departures, and increase airport acceptance rates; (6) Replacing obsolete long range radar with an all solid-state system that offers enhanced range, extended coverage, and vastly improved weather detection; (7) Developing the integrated terminal weather system (ITWS) to link all relevant weather data available in the terminal area; and (8) Deploying improved weather systems, such as the terminal doppler weather radar (TDWR), automated surface observing system (AWOS), and the weather radar processor (WARP) to detect and mitigate the impacts of weather.

There are significant savings for longer routes, but the shorter routes are not as likely to benefit because of the limitations while climbing from or descending to an airport. Growth in aviation increases the complexity of air traffic control and makes it more difficult to allow flights off the preferred routes.



Performance Indicator: Increase the number of flight segments that aircrafts are able to fly off ATC preferred routes.

2000 Goal: 80 percent

1999 Goal: 80 percent

1996 Performance: 75 percent

DOT is implementing the Free Flight Phase I program to allow greater use of direct routes. The enhanced software tools and the Conflict Probe software allows controllers to better project future flight paths and maintain separation for flights off the preferred routes.

Some of FAA's current and ongoing activities include: (1) Implementing, by the year 2002, the core capabilities of Free Flight Phase I in partnership with the users and FAA labor organizations; (2) Beginning evaluation of two-way probe capability at both Indianapolis and Memphis centers; (3) Awarding the hardware procurement contract for the pFAST to aid controllers in making decisions more efficiently regarding the sequencing and runway assignment of terminal arrival aircraft; (4) Awarding the hardware procurement contracts for the traffic management advisor (TMA) to aid controllers in the sequencing

and spacing of en route arrival aircraft; and (5) Deploying the surface management advisor (SMA) at Detroit Metro and Philadelphia airports to facilitate the sharing of information to airlines and to enhance decision making regarding the surface movement of aircraft.

MARITIME VESSEL TRAFFIC SERVICES

The USCG conducts a domestic ice operations program to free vessels beset in ice, establish and maintain ice-free tracks, and escort commercial vessels through ice in the Great Lakes and the Northeast. This action speeds the movement of goods and improves the reliability of commerce – a major economic mission of the Coast Guard. Through icebreaking, certain vital industries are able to avoid more expensive transportation modes and costly overstocking of needed material to carry them through the ice season. The USCG also provides Aids to Navigation (see Maritime Mobility Section referenced on page 31), which improve the speed and reliability of vessel movement.

- ***Ice Operations Programs*** provide capability to support national defense, scientific research and other national interests in Polar Regions. Domestic icebreakers facilitate U.S. maritime transportation through ice-laden domestic waters. In 1997, this program provided services and assets to assure the safety operation of vessels that carried more than 95 percent of maritime traffic.

SHIPBUILDING COMPETITIVENESS GLOBALLY

MARAD's shipbuilding and trade strategic goal guides the agency in carrying out its mission by assisting U.S. shipyards in becoming more competitive in the world shipbuilding markets.

- ***Maritime Guaranteed Loan (Title XI) Program*** promotes the growth and modernization of the U.S. merchant marine fleet and U.S. shipyards in support of MARAD's shipbuilding strategic goal. The program enables companies to obtain long-term financing from the private sector on terms and conditions and at interest rates that may otherwise be unavailable in the commercial market. Under the Title XI Program, the Federal Government guarantees full payment to the lender of the unpaid principal and interest in the event of default. Funds guaranteed under this program are obtained from the private sector to aid in U.S. shipyard construction and reconstruction of merchant vessels and U.S. shipyard modernization projects.

Beginning in FY 1992, the Credit Reform Act required MARAD to obtain appropriations to cover the estimated subsidy cost of new Title XI Loan Guarantees. Appropriations are also required to fund administrative expenses. An appropriation of $32 million was approved for FY 1998 subsidy costs and $3.725 million for administrative expenses. In FY 1998, approvals of $734 million were issued for Title XI financing. As of September 30, 1998, Title XI loan guarantees in force totaled approximately $2.89 billion, covering approximately 731 vessels. MARAD had one default in FY 1998.

MARAD's Title XI Program helps to improve the U.S. shipbuilding competitiveness globally and meets our national security needs. Since 1994, this program has issued approval for 366 ship construction projects and 6 shipyard modernization projects, together totaling over $2.9 billion. Nearly 37 percent of the amount approved has been for eligible export vessels. Continued financing of shipyard modernization projects through the Title XI program will directly aid in furthering the transition of U.S.

shipyards from military to commercial shipbuilding.

INTERNATIONAL MARITIME TRADE

- ***Capital Construction Fund (CCF) Program*** supports MARAD's shipbuilding strategic goal by assisting operators to accumulate their own capital in order to build, acquire, and reconstruct vessels through the deferral of Federal income taxes on eligible deposits. Operators may defer taxes on funds deposited in the CCF and withdraw the money at a later date to build or acquire vessels. In general, the taxable income of the operator is reduced to the extent deposits of money are made into the fund. The outstanding fund balances amounted to $1.1 billion at the end of FY 1998, with 142 fund holders. There have been cumulative deposits of $6.5 billion since program inception to accomplish construction and acquisition programs.

- ***Ocean Freight Differential (OFD) Program*** supports MARAD's trade strategic goal to guide the agency in carrying out its mission to increase the U.S. maritime industry's participation in foreign trade. In general, a portion of all exports of food and humanitarian assistance paid for by the Department of Agriculture and the Agency for International Development must be shipped on U.S. flag vessels.

  The Government pays the differential between shipping costs on U.S. flag vessels and foreign flag vessels. P.L. 99-198 increased from 50 to 75 percent the amount of agricultural commodities under specified programs that must be carried on U.S. flag vessels. In general, the differential shipping costs are covered by the Federal agency shipping the goods, but MARAD is required to reimburse the Department of Agriculture for ocean freight differential costs for the added tonnage above 50 percent but not exceeding the additional 25 percent. These reimbursements are funded through borrowing from the Treasury.

  During the past eleven years, MARAD reimbursed the Department of Agriculture $388 million for its OFD obligations. This resulted in just over 15 million metric tons of additional agricultural food aid cargo for U.S. flag carriers at an average OFD rate of $26 per metric ton.

RAIL TECHNOLOGY

FRA will support the National Railroad Passenger Corporation (Amtrak) as it progresses towards operating self-sufficiency, and develop technologies to support high-speed rail. More specifically, FRA is engaged in the preparation of comprehensive Transportation Plans for the Northeast Corridor (NEC) with Amtrak, commuter operators, State Departments of Transportation and freight railroads. These Plans will insure that intercity passenger trains achieve trip-time goals established by legislation, while at the same time adding capacity to allow for continued growth in commuter operations.

Performance Indicator: Increase the percentage (system wide) of Amtrak trains arriving on time.
1999 Goal: 87 percent 1998 Performance: 78.6 percent

National Railroad Passenger Corporation (AMTRAK) Program

FRA's financial assistance to railroads principally involves grants to the Amtrak for operating expenses, capital projects, and infrastructure improvements on the rail

corridor between Boston, MA and Washington, DC. Grants assist Amtrak's move toward financial stability and very high-quality passenger service.

Technologies to Support High-Speed Rail

As of July 1998, $431 million has been spent (51 percent of cost baseline and 44 percent of current cost estimate). Approximately 18 percent of fabrication work is completed and 99 percent of design work is completed. Work at the Ivy City equipment maintenance facilities is ahead of schedule and car bodies are being assembled at Barre, VT. High horsepower locomotive tests will begin at the Pueblo, CO, Test Center where the equipment is 90 percent fabricated. Full trainset testing will begin January 1999.

The first high-speed trainset is due to begin limited revenue service in October 1999. Full revenue service over the entire Northeast Corridor is scheduled for July 2000. This schedule will permit the significant reduction of New York City, NY and Boston, MA trip-time, but achievement of the 3-hour performance goal will depend on factors beyond the trainset project.

Several construction projects have already been started along the corridor. These projects includes track improvements, upgrades to control systems, fencing and grade crossing elimination, and improvement to service facilities and stations. During FY 1998, FRA tracked Amtrak's progress of the Northeast Corridor.

GRANTS FOR TRANSIT IMPROVEMENTS

FTA will provide investment in transportation infrastructure and technologies to address changes in travel demands, improve the reliability of equipment, reduce travel time, and reduce the real cost of transit. FTA will invest in infrastructure to improve intermodal connections and reduce delays due to intermodal transfers. These actions will advance efficiency of transit and help support the economic growth in areas served.

Accessible, integrated, efficient, and flexible transportation is an enabler of economic growth and trade and is another way the DOT can influence the true economic cost of transportation.

Economic Growth and Competitiveness Domestically and Internationally

One of transit's most important benefits is its ability to move many people efficiently and to reduce the economic costs of congestion. Congestion annually costs more than $40 billion in lost time and fuel in our major metropolitan areas. Without transit, the nationwide costs in these metropolitan areas would be $15 billion higher. Transit takes drivers off the road and improves the commute times of transit riders and automobile users alike. Targeted investments in high-quality transit in strategic corridors can significantly improve overall door-to-door travel times for both transit and highway users.

FTA will provide investments in transportation infrastructure and technologies to address changing travel demands, improve the reliability of equipment, reduce travel time, and reduce the real cost of transit. FTA will invest in infrastructure to improve intermodal connections and reduce delays due to intermodal transfers. These actions will advance efficiency of transit and help support the economic growth in areas served.

FTA's ultimate goal is to increase the amount of transit service supplied Vehicle Revenue Hours one percent per year. As a measure of transit service supply, revenue vehicle hours are a reasonable indicator of the degree to which transit is generating mobility and accessibility benefits.

Performance Indicator: Increase the total transit revenue hours of service (rail and non-rail).
2002 Goal: At or about 209 million transit revenue vehicle hours. 1999 Goal: Increase by one percent per year the amount of transit service supplied. 1995 Performance: 183 million transit revenue vehicle hours.

Investments in transit infrastructure ensure transit succeeds in meeting all of its strategic goals. Analysis of the 1995 National Transit Database (NTD) shows that the national transit infrastructure consists of 135,564 total transit vehicles, 9,582 miles of rail track, 2,620 rail stations, and 1,165 maintenance facilities.

FTA estimates that an investment of $9.7 billion each year over the next 20 years will be required to maintain the Nation's transit facilities and equipment in their current state of repair and to meet projected increases in travel demand. To improve the condition and performance will require an annual investment of $14.2 billion. Funding at this level would increase the comfort and frequency of transit service. Most rush hour riders would be guaranteed seats and would experience shorter waiting times for buses and trains. In FY 1997, FTA's programs funded the following major types of capital investment: $762 million for 7,021 new buses and vans, $820 million for bus facilities and equipment, $352 million for new and renovated rail cars, $1.66 billion for "older" fixed-guideway repair and rehabilitation, and $922 million for the construction of new fixed-guideway systems.

In 1996, Federal funds accounted for 50 percent of total transit capital investment, with State and local sources providing the remainder.

- ***Full Funding Grant Agreements (FFGAs)*** were awarded valued at over $2.7 billion for new fixed guideway construction (four additional FFGAs). These projects include an aggregate local commitment of over $700 million and an overmatch of $200 million, indicating a strong, long-term local commitment to the provision of high-quality public transit service. Since January 1993, FTA has signed FFGAs for 21 projects totaling $8.3 billion. When State and local funds are also considered, these projects will result in the investment of over $14 billion in new mass transit infrastructure. Due to FTA's long term commitment to new starts, directional route miles on rail transit have grown from 5,761 miles in 1985 to 8,206 miles in 1995, a growth rate of 4.2 percent per year.

GARRET A. MORGAN TECHNOLOGY AND TRANSPORTATION FUTURES PROGRAM

Research and Special Programs Administration (RSPA) is the lead Operating Administration within DOT for Garret A. Morgan Technology and Transportation Futures Program, an education outreach program targeted at students of all ages. The program is accomplished through a broadreaching DOT effort that involves every Operating Administration and OST office. RSPA also oversees the University Grants Program, which provides funding grants for transportation-related studies across the Nation.

- ***Garrett A. Morgan Technology and Transportation Futures Program*** was built on partnerships with transportation and education communities. This program features four key components: improving student's math, science and technology skills; strengthening the links between the transportation sector and community colleges, junior colleges, and technical schools; expanding transportation programs at undergraduate and graduate institutions; and easing the transition from school to work in the transportation field. The

life-long learning component will stimulate collaborative partnerships to ensure the availability and accessibility of continuing education programs for transportation professionals. The Program was recognized in Colin Powell's America's Promise Report Card as one that will help fulfill its commitment by reaching 250,000 students.

Through this program, we intend to reach students of all ages through specific activities, such as internships, job shadowing, career days, video conferences, classroom visits, teacher externships and website visits that inform them of the opportunities available in the transportation field and ensure they have the skills and knowledge required for transportation jobs. We will develop a database to count the number of students participating in the program, using report forms submitted by our employees and our partners. By leveraging our resources with those of our partners in the transportation and education communities, our goal is to reach 350,000 in calendar year (CY) 1999 and 1 million by end of CY 2000.

SURFACE TRANSPORTATION BOARD (STB)

The STB promotes substantive and procedural regulatory reform in the economic regulation of surface transportation, and provides a forum for dispute resolution and facilitation of appropriate business transactions. In performing its mission, the STB will continue to streamline case processing and applicable regulations, to ensure that market-based transactions in the public interest are facilitated in a forum for efficient dispute resolution and application of legal and equitable principles, and to develop new opportunities for various sectors of the industry to work together to find creative solutions to persistent industry and/or regulatory problems.

During FY 1998, STB took over 1200 actions, involving adjudications and rulemakings, resolving or otherwise acting upon matters such as rail consolidations, abandonments, and line constructions and sales; review of rail labor arbitral decisions; and rail rates and services. Some of these actions also related to motor carrier undercharge rate cases, intercity bus mergers and pooling matters, motor collective ratemaking, and non-rail rate matters, such as pipeline rate cases. In performance of its goals, the STB has issued several rulemakings streamlining regulations and the regulatory process including rail rate and exemption proceedings, expediting rail line abandonments and discontinuance proceedings, and exempting selected commodities and services from economic regulation.

With respect to rail restructuring, the STB issued a decision approving the control of Conrail by CSX and Norfolk Southern railroads, with various competitive, environmental, labor, and operational reporting and monitoring. The STB continued its annual oversight of the Union Pacific/Southern Pacific merger and initiated a proceeding focusing on rail transportation in the Houston area. The STB has continued its proceeding dealing with the rail service emergency in the West. With regard to rate complaints, the STB affirmed its decision in Arizona Public Services Company that certain rates for the movement of coal were unreasonably high, prescribing a rate that represents a 35 percent reduction from the rate earlier charged by Santa Fe railroad. The STB also issued a decision permitting Amtrak to transport express traffic over rail lines provided that this transportation is ancillary to genuine passenger service. The STB has established a joint task force with the Department of Agriculture to address shipper and railroad information needs relating to recurring seasonal problems affecting grain transportation.